

REMARKS

Claims 9-11, 13, 16, 18-20, 22 and 24 are pending. By this Amendment, claims 1-6, 8, 12, 14-15, 17, 21 and 23 are cancelled, claims 10, 20, 22 are amended, claims 18-19 are rewritten to be in independent form, claim 16 is amended to incorporate the subject matter of claim 17 (as if claim 17 were rewritten in independent form), claim 22 is amended to incorporate a portion of the subject matter of claim 23 (as if claim 23 were rewritten in independent form and then further limited). Claim 7 had been previously cancelled.

A. The Office Action rejects claims 1-6, 8, 12 and 20 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2002/0071638 of Musk. If applicable to the present claims, this rejection is respectfully traversed.

Claims 1-6, 8 and 12 are no longer pending. The Office Action fails to establish a *prima facie* case for the obviousness of method claim 20.

The Office Action admits that Musk does not disclose “the positioning device 22 to be positioned between the frame 20 and the active optical component 40.” However, with respect to claim 1 that is no longer pending, the Office Action asserts that “Musk suggests that the positioning device may instead be used to align various other optical devices including a laser chip [0029], which is an active optical device.” Then with respect to claim 20, the Office Action goes on to only assert that “the method of making the optical module of claim 20 is inherent to this disclosure” (i.e., inherent to Musk). This assertion is respectfully traversed.

To assert inherency, the Patent Office must establish that (1) that the missing descriptive matter (in this case, the method steps) is necessarily present, and (2) that it would be so recognized by a person of ordinary skill. “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’ ” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (internal citations omitted). The Office Action establishes neither.

The Office Action must provide objective evidence or cogent technical reasoning to support the conclusion of inherency. “In relying upon the theory of inherency, the examiner

must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original) (Applicant’s invention was directed to a biaxially oriented, flexible dilation catheter balloon (a tube which expands upon inflation) used, for example, in clearing the blood vessels of heart patients). The examiner applied a U.S. patent to Schjeldahl which disclosed injection molding a tubular preform and then injecting air into the preform to expand it against a mold (blow molding). The reference did not directly state that the end product balloon was biaxially oriented. It did disclose that the balloon was “formed from a thin flexible inelastic, high tensile strength, biaxially oriented synthetic plastic material.” *Id.* at 1462 (emphasis in original). The examiner argued that Schjeldahl’s balloon was inherently biaxially oriented. The Board reversed on the basis that the examiner did not provide objective evidence or cogent technical reasoning to support the conclusion of inherency.).

In the present application, the Office Action does not establish either that the missing matter is necessarily present or that it would be so recognized by skilled persons. Musk does not disclose, teach or suggest, expressly or inherently, a method that includes:

aligning to maximize coupling between the optical fiber and the active optical component by moving the optical fiber and the active optical component with respect to one another in first and second directions, each of the first and second directions being transverse to one another, and both the first and second directions being transverse to the optical path;

as specified in amended claim 20. Withdrawal of the rejection of claim 20 is respectfully solicited.

B. The Office Action rejects claims 14-17 and 21-22 under 35 U.S.C. §103(a) as unpatentable over Musk as applied to claim 12, and further in view of U.S. Patent Publication No. 2004/0052468 of Pham et al. (hereinafter, Pham). If applicable to the present claims, this rejection is respectfully traversed.

Claims 14-15, 17 and 21 are no longer pending. The Office Action fails to establish a *prima facie* case for the obviousness of claims 16 and 22.

The M.P.E.P. instructs that “examiners should apply the test for patentability under 35 U.S.C. § 103 set forth in *Graham*.” See M.P.E.P. 2141 through 2143. Even if, *arguendo*, prior art references disclose all of the elements specified in a claimed invention, obviousness

also requires that there exist some suggestion to motivate a person of ordinary skill to combine such elements or modify known elements in a way that achieves the claimed invention. Establishment of a suggestion or incentive to modify or combine prior art references requires substantial evidence of such suggestion or incentive.

Musk in view of Pham does not disclose, teach or suggest an optical module that includes:

means for holding the positioning device in position, wherein  
the means for holding comprises an adhesive and a micro  
heater capable of activating the adhesive

as specified in claim 16.

Even if, *arguendo*, solder were to be regarded as a type of adhesive, the micro heater of Pham melts solder, and when turned off, allows the solder to solidify. Musk in view of Pham does not disclose, teach or suggest that the claimed micro heater activates an adhesive as specified in the claim. Neither Musk nor Pham discloses any fixing method that is based on activating and adhesive. This feature provides the claimed invention with distinct advantages. For example, fixing the components can more easily be achieved after alignment. Neither Musk nor Pham recognizes these advantages. Absent recognition of these advantages, there is no motivation to modify Musk to achieve the invention defined by claim 16.

Withdrawal of the rejection of claim 16 is respectfully solicited.

Claim 22 incorporates the limitations of claim 23, and as such is merely claim 23 rewritten into independent form. Nevertheless, with respect to claim 22, the Office Action asserts only that "the methods of making an optical module of claims 21 and 22 are inherent to this disclosure" (i.e., inherent to Musk). This assertion is respectfully traversed at least because inherency is improperly relied upon and the additional limitation incorporated from claim 23 (i.e., claim 23 rewritten into independent form) renders claim 22 unobvious over Musk in view of Pham, or for that matter, unobvious over Musk in view of Pham and further in view of Maynard.

To assert inherency, the Patent Office must establish that (1) that the missing descriptive matter (in this case, the method steps) is necessarily present, and (2) that it would be so recognized by a person of ordinary skill as more fully discussed above with respect to the rejection of method claim 20. The Office Action fails to establish a *prima facie* case for

the obviousness of claim 22 at least because it does not establish either that the missing matter is necessarily present or that it would be so recognized by skilled persons.

Musk in view of Pham does not disclose, teach or suggest a method that includes:

holding one of the pair of elements in position with respect to  
the other after aligning by activating an adhesive set by  
exposure to RF radiation

as specified in claim 22. Furthermore, the addition of Maynard does not disclose, teach or suggest "activating an adhesive set by exposure to RF radiation" as specified in claim 22. The Office Action does not establish any motivation to replace the solder disclosed in Pham with "an adhesive set by exposure to RF radiation" as specified in claim 22. Evidence of a motivation to modify is necessary to establish a *prima facie* case for the obviousness of claim 22. See M.P.E.P. 2143.

Withdrawal of the rejection of claim 22 is respectfully solicited.

C. The Office Action rejects claims 18 and 23 under 35 U.S.C. §103(a) as unpatentable over Musk in view of Pham as applied to claim 16, and further in view of U.S. Patent No. 6,086,776 to Maynard. If applicable to the present claims, this rejection is respectfully traversed.

Claim 23 is no longer pending; however, limitations of claim 23 have been incorporated into pending claim 22. Claim 22 is prior claim 23 rewritten into independent form.

With respect to the rejection of claim 18, and if applicable to the rejection of method claim 22, the Office Action fails to establish a *prima facie* case for the obviousness of claims 18 and 22.

The Office Action asserts that "Maynard teaches that the optical element may be secured by proper alignment by a UV-curable adhesive *instead of solder* (col. 9, line 24)" (emphasis in the Office Action). Even if true, *arguendo*, the Office Action does not even assert, not to mention establish with evidence, that the adhesive is capable of activation by exposure to RF radiation as specified in claim 18 and 22.

Musk in view of Pham and further in view of Maynard does not disclose, teach or suggest an optical module with a means for holding the positioning device that includes:

an adhesive capable of activation by exposure to RF radiation

as specified in claim 18. Withdrawal of the rejection of claims 18 and 23 (the subject matter of which is now in claim 22) is respectfully requested.

D. The Office Action rejects claims 13, 19 and 24 under 35 U.S.C. §103(a) as unpatentable over Musk as applied to claim 12 and 20, and over Musk in view of Pham as applied to claims 16 and 20, and further in view of U.S. Patent No. 6,748,141 to Kennedy et al. (hereinafter Kennedy). If applicable to the present claims, this rejection is respectfully traversed.

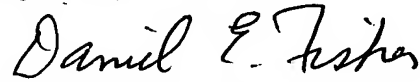
As established in the enclosed Statement of Common Ownership, Kennedy is not prior art to the present application under 35 U.S.C. §103(c)(1) which states "Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person." Both Kennedy et al. and the present application were, at the time of the invention, either "owned by the same person [Agilent] or subject to an obligation of assignment to the same person [Agilent]." Kennedy et al. does not qualify as prior art under any other of the subsections of section 102.

Furthermore the combination of Musk in view of Pham does not disclose, teach or suggest "a position memory circuit operable to control the positioning device" as specified in claims 13 and 19 and does not disclose, teach or suggest "positioning the positioning device according to a position memory circuit" as specified in claim 24. Musk in view of Pham does not even disclose the position memory circuit and, furthermore, does not disclose, teach or suggest any reason to modify prior art structures to include a position memory circuit. Accordingly, withdrawal of the rejection of claims 13, 19 and 24 is earnestly solicited.

In view of the present amendments and remarks, favorable reconsideration is courteously requested. If there are any remaining issues that can be expedited by a telephone conference, the Examiner is courteously invited to telephone counsel at the number indicated below.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 50-1078.

Respectfully submitted,



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